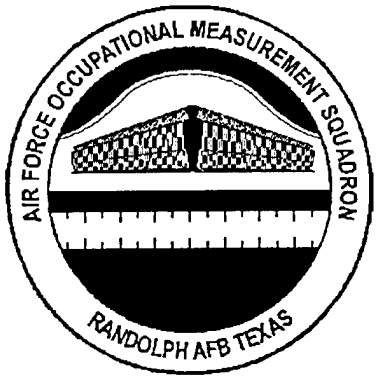

UNITED STATES AIR FORCE

OCCUPATIONAL SURVEY REPORT

MISSILE AND SPACE SYSTEMS MAINTENANCE

AFSC 2M0X2

OSSN 2264

DECEMBER 1997

OCCUPATIONAL ANALYSIS PROGRAM
AIR FORCE OCCUPATIONAL MEASUREMENT SQUADRON
AIR EDUCATION AND TRAINING COMMAND
1550 5TH STREET EAST
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TABLE OF CONTENTS

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TABLE OF CONTENTS
(Tables, Figures, Appendices)

TABLE OF CONTENTS (CONTINUED)
(Tables, Figures, Appendices)

PREFACE

This report presents the results of an Air Force Occupational Survey of the Missile and Space Systems Maintenance career ladder, Air Force Specialty Code (AFSC) 2M0X2. Authority for conducting occupational surveys is contained in AFI 36-2623. Copies of this report and pertinent computer printouts are distributed to the Air Force Functional Manager, the operations training location, all major using commands, and other interested operations and training officials.

The survey instrument was developed by Chief Master Sergeant Lionel Robertson. Computer programming and administrative support were provided by Ms. Rebecca R. Hernandez and Mr. Richard G. Ramos, respectively. Captain Lawrence J. Schad analyzed the data and wrote the final report. This report has been reviewed and approved by Lieutenant Colonel Roger W. Barnes, Chief, Airman Analysis Section, Occupational Analysis Flight, Air Force Occupational Measurement Squadron (AFOMS).

Additional copies of this report can be obtained by writing to AFOMS/OMYXI, 1550 5th Street East, Randolph AFB Texas 78150-4449, or by calling DSN 487-5543. For information on the Air Force occupational survey process or other on-going projects, visit our web site at http://www.omsq.af.mil.

GEORGE KAILIWAI III, Lt Col, USAF
Commander
Air Force Occupational Measurement Sq

JOSEPH S. TARTELL
Chief, Occupational Analysis Flight
Air Force Occupational Measurement Sq

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SUMMARY OF RESULTS

1. **Survey Coverage**: This report was requested by the HQ AFSPC Functional Manager to assess the present status of the AFSC 2M0X2 Missile and Space Systems Maintenance career ladder. Our primary interest is to evaluate the extent to which members are receiving the appropriate equipment-related training. Additional concerns are to validate training requirements and to verify changes which have occurred due to the merger of the former AFSC 411X1 and AFSC 2M0X2A (411X1A) career fields. Survey results are based on data provided by 652 respondents, which accounts for 71 percent of all assigned personnel. Training Emphasis information is not provided based on unacceptable interrater reliability. Ninety-two percent of the personnel resources belong to AFSPC.

2. **Specialty Jobs**: Four clusters and 10 jobs were identified within the career ladder. The four clusters are composed of: Missile Maintenance, Research and Development, Management and Supervision, and Supply and Equipment activities. The jobs identified were: Missile Handling, Peacekeeper Maintenance, Missile Maintenance Support, Quality Assurance, Pneudraulics, Training, Launch Vehicle Maintenance, Launch Site Refurbishment, and Peacekeeper Handling.

3. **Career Ladder Progression**: The majority of the 118 first-term airmen are employed within the Missile Maintenance Cluster (42 percent), Supply and Equipment Cluster (22 percent), Peacekeeper Maintenance Job (11 percent), and Missile Handling Job (7 percent). These areas represent the core, entry-level Intercontinental Ballistic Missile (ICBM) maintenance and support jobs. Nineteen percent of the sample reported holding the 3-skill level, 53 percent had attained the 5-skill level, and 28 percent were awarded the 7-skill level. However, based on total active federal military service (TAFMS) the breakout per group is as follows: 17 percent of the sample have between 1 to 48 months TAFMS, 25 percent have between 49 to 96 months TAFMS, while 57 percent possess 97 months TAFMS or greater. Therefore, the AFSC 2M0X2 career ladder is relatively stable and possesses both experience and maturity.

4. **Training Analysis**: The Specialty Training Standard is supported by survey data for the core missile maintenance tasks. In addition, tasks which had a low percentage of members performing were being taught on the job rather than at in-resident, operational training. For example, many tasks within both the maintenance sub-specialties (e.g., Pneudraulics) and former AFSC 411X0/411X1/411X2 specialties (e.g., Research and Development) were accomplished by less than 20 percent of the career ladder. Thus, it is appropriate that these types of tasks not be trained as part of the 3-skill level awarding course.

5. **Job Satisfaction**: In general, most AFSC 2M0X2 survey respondents reported they were satisfied with their jobs. However, satisfaction levels are lower than a comparative 1996 sample of mission equipment maintenance AFSCs. In addition, satisfaction levels were lower than the levels reported in the 1994 AFSC 2M0X2A study. Nearly all specialty jobs reported acceptable job satisfaction indicators, except within the Peacekeeper Maintenance Job, Launch Site Refurbishment Job, and the Supply and Equipment Cluster. It is clear that as members become more senior, their reported satisfaction levels increase across all indicators.

6. **Implications**: Nearly 45 percent of all members perform missile maintenance related duties. The remaining personnel work in either management and supervision, supporting roles, or spacelift related (former AFSC 411X1/411X2/411X3) duties. Career ladder progression is typical across the core, ICBM maintenance duties, i.e., personnel progress from entry-level, technical duties to supervisory and managerial positions. However, progression is atypical within the career field subspecialties. For example, in the Research and Development Cluster, and in the Pneudraulics, Launch Vehicle Maintenance, Payload Controller, and Launch Site Refurbishment jobs, the majority of the hands-on, technical work is being performed by mid-to-senior, 7-level NCOs. The past 4 years have included mission deactivations, realignment of weapon systems, personnel reductions, and career ladder mergers. Future deactivations and systems reconfigurations remain a genuine possibility. Presently, there appears to be little integration between personnel from the former AFSCs 2M0X2A and 411X0/411X1/411X2. The majority of personnel within the Research and Development, Launch Vehicle Maintenance, and Payload Controller jobs have an average of nearly 15 years TAFMS. Therefore, without management intervention, these space-related opportunities will be reserved for senior members only.

OCCUPATIONAL SURVEY REPORT (OSR)
MISSILE AND SPACE SYSTEMS MAINTENANCE
(AFSC 2M0X2)

INTRODUCTION

This is a report of an occupational survey of the Missile and Space Systems Maintenance career ladder conducted by the Air Force Occupational Measurement Squadron. The current Missile and Space Systems Maintenance career ladder was created in October 1993 with the merger from AFSC 411X1 and AFSC 2M0X2A (formerly AFSC 411X1A) to 2M0X2 as the result of an entirely revised personnel classification system. Survey data will be used to identify current utilization patterns among career ladder personnel and evaluate career ladder documents and training programs. The most recent OSRs published for the former AFSCs were in September 1993 and January 1994, respectively.

Background

As described in the AFMAN 36-2108 *Specialty Description*, dated October 1994, Missile and Space Systems Maintenance personnel service and maintain unmanned air vehicles, boosters, payloads, research and development systems, environmental blast doors and valves, associated subsystems, components, and support equipment. Duties include: performs missile maintenance actions and insures compliance with international treaties; mechanically or electrically connects or disconnects reentry systems, guidance and control sections, missile stages, propulsion systems, and secondary ordnance devices; prepares missiles and facilities for simulated launch and follow-on test and evaluation; designs research and development systems; and performs acquisition and activation activities.

Personnel entering the AFSC 2M0X2 career ladder must attend the Electronic Principles course at Lackland AFB TX prior to attending the Missile and Space Systems Maintenance course at Vandenberg AFB CA. Upon completion of this basic course, the members are awarded the 3-skill level (2M032). These courses provide training in the knowledge and skills necessary to perform the core Missile and Space Systems Maintenance duties.

Entry into this career ladder currently requires an Armed Services Vocational Aptitude Battery score of MECHANICAL - 51; a strength factor of "N" (weight lift of 100 lbs.) is also required.

SURVEY METHODOLOGY

Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory (JI) Air Force Personnel Test 90-2M0-097, dated October 1996. A tentative task list was prepared after reviewing pertinent career ladder publications and directives, pertinent tasks from the previous survey instruments, and data from the last OSRs. The preliminary task list was refined and validated through personal interviews with 55 subject-matter experts (SMEs) at the operational training location and at the following installations:

BASE	UNIT VISITED
Vandenberg AFB CA	532 TRS/CCT
Patrick AFB FL	45 OG/CCS
Malmstrom AFB MT	341 LG/TA
F. E. Warren AFB WY	90 LG/TA
Kirtland AFB NM	Phillips Lab/SX
Vandenberg AFB CA	30 LG/LGQ 30 OG/MA Det 9 SMC/CCS
Edwards AFB CA	OL-AC Phillips Lab/PK

The resulting JI contains a comprehensive listing of 1,240 tasks grouped under 23 duty headings, and a background section requesting such information as grade, major command (MAJCOM) assigned, organizational level, job title, functional area, schedule or shift worked, types of launch systems/missiles currently maintained, and forms used.

Survey Administration

From January 1997 through April 1997, base training offices at operational units worldwide administered the inventory to eligible AFSC 2M0X2 personnel. Job incumbents were selected from a computer-generated mailing list obtained from personnel data tapes maintained by the Air Force Personnel Center, Randolph AFB TX. Each inventory respondent initially completed an identification and biographical information section and then checked each task performed in his or

her current job. After indicating the tasks performed, each member then rated each of these tasks on a 9-point scale, showing relative time spent on that task, as compared to all other tasks checked. The ratings ranged from 1 (very small amount time spent) through 5 (about average time spent) to 9 (very large amount time spent). To determine relative time spent for each task checked by a respondent, all of the incumbent's ratings are assumed to account for 100 percent of his or her time spent on the job and are summed. Each task rating is then divided by the total task ratings and multiplied by 100 to provide a relative percentage of time for each task. This procedure provides a basis for comparing tasks in terms of both percent members performing and average percent time spent.

Survey Sample

Personnel were selected to participate in this survey so as to ensure an accurate representation across MAJCOMs and military paygrade groups. All eligible AFSC 2M0X2 personnel were mailed survey booklets. Table 1 reflects the percentage distribution, by MAJCOM, of assigned AFSC 2M0X2 personnel. The 652 respondents in the final sample represent 71 percent of the total assigned personnel. Table 2 reflects the paygrade distribution for these AFSC 2M0X2 personnel.

TABLE 1

COMMAND DISTRIBUTION OF 2M0X2 PERSONNEL

COMMAND	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
AFSPC	92	92
AFMC	6	6
OTHER	2	2

TOTAL ASSIGNED = 922*
TOTAL SURVEYED = 897
TOTAL IN SURVEY SAMPLE = 652
PERCENT OF ASSIGNED IN SAMPLE = 71%
PERCENT OF SURVEYED IN SAMPLE = 73%

* Excludes personnel in PCS, student, or hospital status, or less than 6 weeks on the job

TABLE 2

PAYGRADE DISTRIBUTION OF SURVEY SAMPLE

GRADE	PERCENT OF ASSIGNED	PERCENT OF SAMPLE
E-1 - E-3	17	17
E-4	26	25
E-5	30	32
E-6	14	14
E-7	12	11
E-8	<1	1
E-9	0	0

Both Command and Paygrade distribution of the survey sample are comparable to the percent assigned. Therefore, the sample is a valid representation of the career ladder population.

Task Factor Administration

Job descriptions alone do not provide sufficient data for making decisions about career ladder documents or training programs. Task factor information is needed for a complete analysis of the career ladder. To obtain the needed task factor data, selected senior AFSC 2M0X2 personnel (generally E-6 or E-7 craftsmen) also completed a second booklet for either training emphasis (TE) or task difficulty (TD). These booklets were processed separately from the JIs. This information is used in a number of different analyses discussed in more detail within the report.

Training Emphasis (TE): TE is a rating of the amount of emphasis that should be placed on tasks in entry-level training. The 41 senior NCOs who completed a TE booklet were asked to select tasks they felt required some sort of structured training for entry-level personnel and then indicate how much training emphasis these tasks should receive, from 1 (extremely low emphasis) to 9 (extremely high emphasis). Structured training is defined as training provided at resident operational training schools, field training detachments, mobile training teams, formal on-the-job training (OJT), or any other organized training method. Interrater reliability for these 41 raters was not acceptable for use within this survey report.

Task Difficulty (TD): TD is an estimate of the amount of time needed to learn how to do each task satisfactorily. The 43 senior NCOs who completed TD booklets were asked to rate the difficulty of each task using a 9-point scale (extremely low to extremely high). Interrater reliability was acceptable. Ratings were standardized, so tasks have an average difficulty of 5.00 and a standard deviation of 1.00. Any task with a TD rating of 6.00 or above is considered to be difficult to learn.

When used in conjunction with the primary criterion of percent members performing, both TE and TD ratings can provide insight into first-enlistment personnel training requirements. Such insights may suggest a need for lengthening or shortening portions of instruction supporting entry-level jobs.

SPECIALTY JOBS
(Career Ladder Structure)

The first step in the analysis process is to identify the structure of the career ladder in terms of the jobs performed by the respondents. The Comprehensive Occupational Data Analysis Program (CODAP) assists by creating an individual job description for each respondent based on the tasks performed and relative amount of time spent on these tasks. The CODAP automated job clustering program then compares all the individual job descriptions, locates the two descriptions with the most similar tasks and time spent ratings, and combines them to form a composite job description. In successive stages, CODAP either adds new members to this initial group, or forms new groups based on the similarity of tasks and time spent ratings.

The basic group used in the hierarchical clustering process is the *Job*. When two or more jobs have a substantial degree of similarity in tasks performed and time spent on tasks, they are grouped together and identified as a *Cluster*. The structure of the career ladder is then defined in terms of jobs and clusters of jobs.

Overview of Specialty Jobs

Based on the analysis of tasks performed and the amount of time spent performing each task, 10 independent jobs (IJ) and 4 clusters were identified within the career ladder. Figure 1 illustrates the jobs performed by AFSC 2M0X2 personnel.

A listing of these jobs is provided below. The stage (ST) number shown beside each title references computer printed information, and the letter "N" indicates the number of personnel in each group.

AFSC 2M0X2
CAREER LADDER JOBS

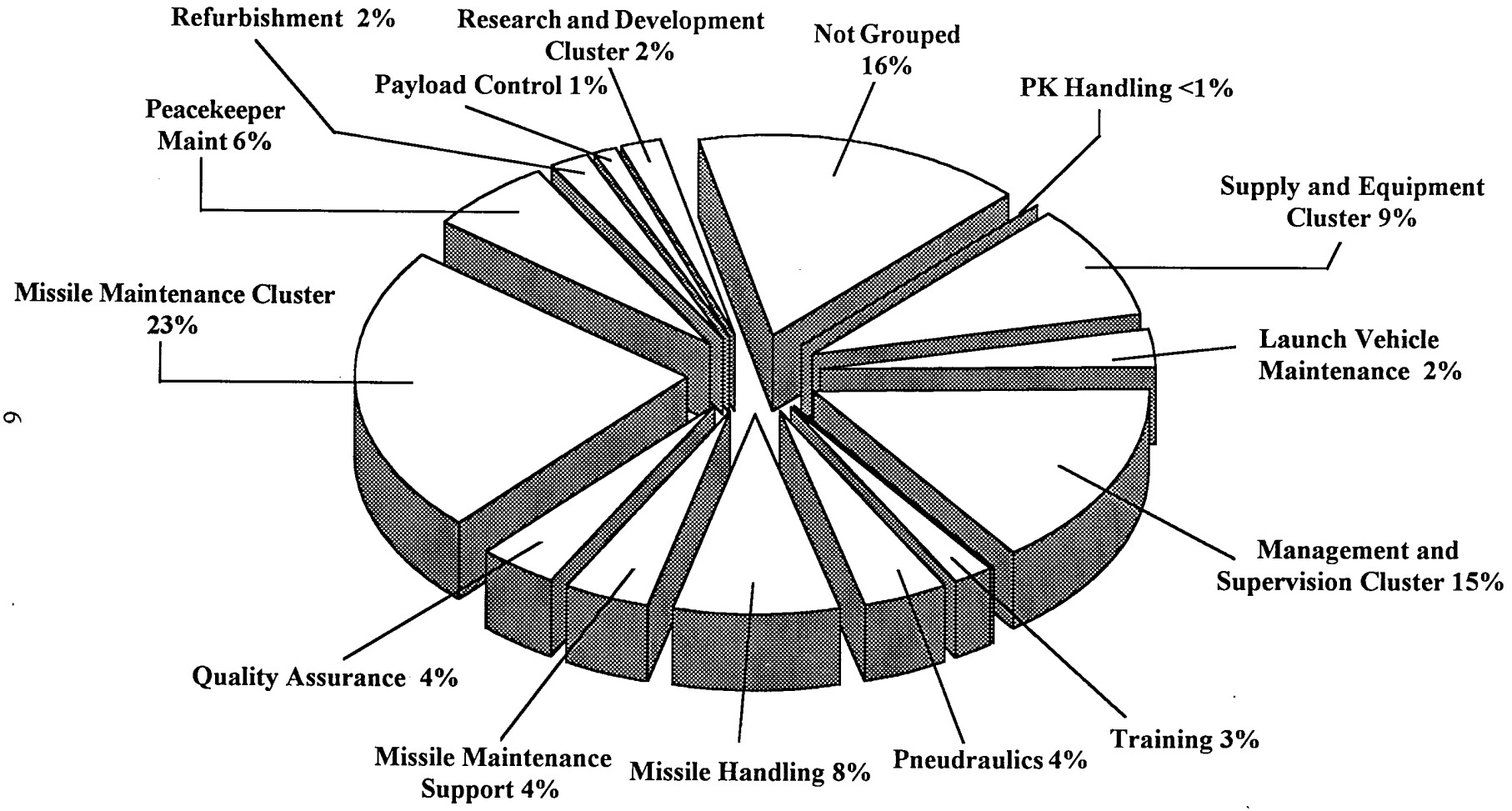

FIGURE 1

I. MISSILE MAINTENANCE CLUSTER (ST105, N=153).

II. MISSILE HANDLING JOB (ST186, N=49).

III. PEACEKEEPER MAINTENANCE JOB (ST135, N=37).

IV. MISSILE MAINTENANCE SUPPORT JOB (ST270, N=27).

V. PNEUDRAULICS JOB (ST148, N=24).

VI. LAUNCH SITE REFURBISHMENT JOB (ST403, N=14).

VII. RESEARCH AND DEVELOPMENT CLUSTER (ST046, N=14).

VIII. LAUNCH VEHICLE MAINTENANCE JOB (ST116, N=12).

IX. PAYLOAD CONTROLLER JOB (ST205, N=9).

X. PEACEKEEPER HANDLING JOB (ST119, N=6).

XI. QUALITY ASSURANCE JOB (ST174, N=6).

XII. MANAGEMENT, SUPERVISORY, AND ADMINISTRATIVE CLUSTER (ST068, N=100).

XIII. SUPPLY AND EQUIPMENT CLUSTER (ST062, N=61).

XIV. TRAINING JOB (ST127, N=17).

The respondents forming these jobs account for 84 percent of the survey sample. The remaining 16 percent, for one reason or another, did not group into one of these jobs. Examples of job titles for ungrouped personnel include Safety Representative, Scheduler, Planner, TODO, Vehicle Controller, Test Manager, Resource Advisor, Hazardous Waste Manager, Computer Network Administrator, and Facility Manager.

2M0X2 Job Descriptions

The following paragraphs contain brief descriptions of the jobs identified through the career ladder structure analysis. Personnel are employed by an Air Force Space Command activity, unless stated otherwise. Table 3 represents the average time spent on duties by members of the specialty jobs. Table 4 reflects selected background data for each of the specialty jobs. Appendix A contains a list of representative tasks for each job.

TABLE 3

AVERAGE PERCENT TIME SPENT ON DUTIES BY SPECIALTY JOBS

DUTIES		MISSILE MAINT (ST105)	MISSILE HANDLING (ST186)	PEACEKEEPER MAINT (ST135)	MISSILE MAINT SUPPORT (ST270)	PNEUDRAULICS (ST148)
A	MANAGEMENT AND SUPERVISORY	7	8	5	9	9
B	TRAINING	4	4	3	4	3
C	GENERAL ADMIN AND TECHNICAL ORDER	1	2	2	2	1
D	GENERAL SUPPLY AND EQUIPMENT	2	8	3	6	5
E	MAINTENANCE MANAGEMENT	*	*	*	3	2
F	GENERAL MAINTENANCE	5	5	5	5	4
G	MISSILE MAINTENANCE	74	18	46	14	13
H	MISSILE HANDLING AND TRANSPORTING	1	41	26	2	*
I	MISSILE MAINTENANCE SUPPORT	1	3	3	54	1
J	VEHICLE AND EQUIPMENT CONTROL	1	4	4	*	9
K	MISSILE PNEUDRAULICS	*	4	*	*	49
L	MISSILE FACILITIES	1	2	1	2	2
M	ORDNANCE DESTRUCT	*	*	*	*	*
N	POSTLAUNCH REFURBISHMENT	*	*	*	*	*
O	PAYLOAD, UPPERSTAGE OR FAIRING	*	*	*	*	*
P	GENERAL LAUNCH VEHICLE	*	*	*	*	*
Q	LAUNCH VEHICLE MECHANICAL	*	*	*	*	*
R	LAUNCH VEHICLE ELECTRICAL	*	*	*	*	*
S	LAUNCH VEHICLE FACILITIES	*	*	*	*	*
T	GENERAL RESEARCH AND DEVELOPMENT	*	*	*	*	*
U	SOLID ROCKET MOTOR	*	*	*	*	*
V	PROPULSION	*	*	*	*	*
W	FACILITY ENVIRONMENTAL	*	*	*	*	1

* Less than 1 percent

TABLE 3 (CONTINUED)

AVERAGE PERCENT TIME SPENT ON DUTIES BY SPECIALTY JOBS

DUTIES	POST LAUNCH REFURBISH (ST403)	RESEARCH & DEVELOP CLUSTER (ST046)	LAUNCH VEHICLE MAINT (ST116)	PAYLOAD CONTROL (ST205)	PK HANDLING (ST119)
A MANAGEMENT AND SUPERVISORY	5	18	14	19	25
B TRAINING	3	2	3	7	11
C GENERAL ADMIN AND TECHNICAL ORDER	*	2	2	3	2
D GENERAL SUPPLY AND EQUIPMENT	3	11	1	2	4
E MAINTENANCE MANAGEMENT	*	*	*	*	*
F GENERAL MAINTENANCE	7	3	*	*	5
G MISSILE MAINTENANCE	31	*	*	*	15
H MISSILE HANDLING AND TRANSPORTING	*	*	*	*	16
I MISSILE MAINTENANCE SUPPORT	2	*	*	*	5
J VEHICLE AND EQUIPMENT CONTROL	*	*	*	*	4
K MISSILE PNEUDRAULICS	*	*	*	*	1
L MISSILE FACILITIES	*	*	*	*	*
M ORDNANCE DESTRUCT	*	*	*	*	*
N POSTLAUNCH REFURBISHMENT	48	*	*	*	*
O PAYLOAD, UPPERSTAGE OR FAIRING	*	*	5	31	*
P GENERAL LAUNCH VEHICLE	*	*	22	29	*
Q LAUNCH VEHICLE MECHANICAL	*	*	20	*	*
R LAUNCH VEHICLE ELECTRICAL	*	*	2	*	*
S LAUNCH VEHICLE FACILITIES	*	*	7	*	*
T GENERAL RESEARCH AND DEVELOPMENT	*	43	*	*	*
U SOLID ROCKET MOTOR	*	6	5	*	10
V PROPULSION	*	12	19	7	*
W FACILITY ENVIRONMENTAL	*	*	*	*	*

* Less than 1 percent

TABLE 3 (CONTINUED)

AVERAGE PERCENT TIME SPENT ON DUTIES BY SPECIALTY JOBS

DUTIES	QUALITY ASSURANCE (ST174)	MANAGEMENT AND SUPERVISION (ST068)	SUPPLY CLUSTER (ST062)	TRAINING (ST127)
A MANAGEMENT AND SUPERVISORY	37	59	14	21
B TRAINING	20	7	3	56
C GENERAL ADMIN AND TECHNICAL ORDER	10	9	2	7
D GENERAL SUPPLY AND EQUIPMENT	8	9	36	6
E MAINTENANCE MANAGEMENT	5	5	3	2
F GENERAL MAINTENANCE	3	1	12	*
G MISSILE MAINTENANCE	3	2	9	2
H MISSILE HANDLING AND TRANSPORTING	1	*	*	*
I MISSILE MAINTENANCE SUPPORT	*	*	3	*
J VEHICLE AND EQUIPMENT CONTROL	5	2	16	1
K MISSILE PNEUDRAULICS	*	*	*	*
L MISSILE FACILITIES	1	*	*	*
M ORDNANCE DESTRUCT	*	*	*	*
N POSTLAUNCH REFURBISHMENT	*	*	*	*
O PAYLOAD, UPPERSTAGE OR FAIRING	*	*	*	*
P GENERAL LAUNCH VEHICLE	*	1	*	2
Q LAUNCH VEHICLE MECHANICAL	*	*	*	*
R LAUNCH VEHICLE ELECTRICAL	*	*	*	*
S LAUNCH VEHICLE FACILITIES	*	*	*	*
T GENERAL RESEARCH AND DEVELOPMENT	*	*	*	*
U SOLID ROCKET MOTOR	*	*	*	*
V PROPULSION	*	*	*	*
W FACILITY ENVIRONMENTAL	*	*	*	*

* Less than 1 percent

TABLE 4

SELECTED BACKGROUND DATA FOR SPECIALTY JOBS

	MISSILE MAINT (ST105)	MISSILE HANDLING (ST186)	PEACE-KEEPER MAINT (ST135)	MISSILE MAINT SUPPORT (ST270)	PNEUDRAULICS (ST148)
NUMBER IN GROUP	153	49	37	27	24
PERCENT OF SAMPLE	23%	8%	6%	4%	4%
PERCENT IN CONUS	100%	100%	100%	93%	100%
DAFSC DISTRIBUTION					
2M032A	30%	14%	32%	15%	4%
2M052	57%	78%	57%	67%	88%
2M072	13%	8%	11%	19%	8%
2M092	0%	0%	0%	0%	0%
PAYGRADE DISTRIBUTION					
E-1 to E-3	28%	12%	29%	11%	0%
E-4	33%	39%	43%	30%	50%
E-5	32%	43%	19%	48%	42%
E-6	6%	4%	8%	11%	8%
E-7	1%	2%	0%	0%	0%
E-8	0%	0%	0%	0%	0%
AVERAGE NUMBER OF TASKS PERFORMED	81	97	100	89	156
AVERAGE MONTHS IN CAREER FIELD	76	88	72	107	100
AVERAGE MONTHS IN SERVICE	81	94	75	114	105
PERCENT IN FIRST ENLISTMENT (1-48 MOS TAFMS)	33%	16%	35%	11%	0%
PERCENT SUPERVISING	25%	29%	24%	37%	42%

TABLE 4 (CONTINUED)

SELECTED BACKGROUND DATA FOR SPECIALTY JOBS

	POSTLAUNCH REFURBISH (ST403)	RESEARCH & DEVELOPMENT CLUSTER (ST046)	LAUNCH VEHICLE MAINT (ST116)	PAYLOAD CONTROL (ST205)	PK HANDLING (ST119)
NUMBER IN GROUP	14	14	12	9	6
PERCENT OF SAMPLE	2%	2%	2%	1%	*
PERCENT IN CONUS	100%	100%	100%	100%	100%
DAFSC DISTRIBUTION					
2M032A	0%	0%	0%	0%	0%
2M052	100%	57%	50%	33%	100%
2M072	0%	43%	50%	67%	0%
2M092	0%	0%	0%	0%	0%
PAYGRADE DISTRIBUTION					
E-1 to E-3	0%	0%	0%	0%	0%
E-4	79%	0%	0%	0%	0%
E-5	21%	44%	42%	44%	100%
E-6	0%	33%	50%	22%	0%
E-7	0%	22%	8%	33%	0%
E-8	0%	0%	0%	0%	0%
AVERAGE NUMBER OF TASKS PERFORMED	77	68	128	93	75
AVERAGE MONTHS IN CAREER FIELD	74	170	178	143	124
AVERAGE MONTHS IN SERVICE	80	184	179	167	132
PERCENT IN FIRST ENLISTMENT (1-48 MOS TAFMS)	0%	0%	0%	0%	0%
PERCENT SUPERVISING	21%	33%	33%	44%	100%

* Less than 1 percent

TABLE 4 (CONTINUED)

SELECTED BACKGROUND DATA FOR SPECIALTY JOBS

	QUALITY ASSURANCE (ST174)	MANAGEMENT & SUPERVISION (ST068)	SUPPLY CLUSTER (ST062)	TRAINING (ST127)
NUMBER IN GROUP	6	100	61	17
PERCENT OF SAMPLE	4%	15%	9%	3%
PERCENT IN CONUS	100%	100%	100%	94%
DAFSC DISTRIBUTION				
2M032A	0%	1%	43%	0%
2M052	67%	17%	52%	59%
2M072	33%	81%	5%	41%
2M092	0%	1%	0%	0%
PAYGRADE DISTRIBUTION				
E-1 to E-3	0%	1%	43%	0%
E-4	0%	3%	25%	18%
E-5	67%	13%	30%	47%
E-6	33%	32%	2%	29%
E-7	0%	46%	2%	6%
E-8	0%	5%	0%	0%
AVERAGE NUMBER OF TASKS PERFORMED	24	57	24	43
AVERAGE MONTHS IN CAREER FIELD	129	185	73	147
AVERAGE MONTHS IN SERVICE	137	199	78	156
PERCENT IN FIRST ENLISTMENT (1-48 MOS TAFMS)	0%	1%	43%	0%
PERCENT SUPERVISING	17%	91%	23%	41%

I. MISSILE MAINTENANCE CLUSTER (ST105, N=153). This cluster of two IJs is the largest within the career ladder and represents 23 percent of the sample. Therefore, this is the core work of the career ladder. These individuals work exclusively with the Minuteman Intercontinental Ballistic Missile (ICBM) weapon system. Personnel performing these duties report spending three-quarters of their time on missile maintenance related activities, such as performing inspections, handling, transporting, removing and installing reentry systems (RS), propulsion system rocket engines (PSRE), and missile guidance sets (MGS). Their remaining time is distributed between management and supervisory, training, and supply and equipment activities. An average of 81 tasks are performed within this cluster, which approximates the typical number of tasks (80) being performed across jobs within the career ladder. Representative tasks performed include:

perform inspections on RS insulation
perform launch facility (LF) entry and exit procedures
open or close launcher closures
remove or install RSs
perform RS handling and transporting procedures
penetrate and exit launch equipment buildings (LEBs), launch equipment rooms (LERs), and launch support buildings (LSBs)
perform inspections on PSRE insulation
perform inspections on MGS insulation
load or unload RSs
position, stabilize, or destabilize PTs

The first job within this cluster involves 8 members performing quality assurance, inspection, and training functions. All personnel performing these duties are on second or subsequent enlistments and serve in the paygrades of E-4 through E-6. The second and most prominent job within this cluster include the remaining 145 members who perform the core missile maintenance duties illustrated above. This job is composed of 33 percent first-term airmen with 90 percent of all incumbents serving in the E-3 through E-5 paygrades.

As a whole, this cluster of jobs is composed of one-third first-term airmen. The average TAFMS found within this cluster is 81 months. Approximately 93 percent of all members are found within the E-1 through E-5 paygrades. Thus, 87 percent hold either DAFSC 2M032A or DAFSC 2M052. This cluster is also reflective of a typical entry-level position within the overall career ladder.

II. MISSILE HANDLING JOB (ST186, N=49). This job comprises 8 percent of the sample. These 49 individuals also work exclusively with the Minuteman ICBM weapon system. Entry- to mid-level members also perform critical missile handling, transporting, and missile

maintenance activities. However, the essence of this job is to either emplace or remove the ICBM from the launch silo using the transporter erector (TE). On average, 89 tasks are performed by a typical job incumbent. Typical tasks performed include:

position and secure TEs at PLTFs or LF pylons
perform operational checks on TE ECSs
emplace or remove missiles from silos
perform operational checks on TE emplacement systems
perform loaded MT, SSCBM, or TE transit storage and handling operations
load or unload equipment for missile handling team dispatches
perform postremoval or emplacement operations
prepare TEs for emplacing missiles
remove TEs from PLTFs or LFs
prepare TEs for removing missiles
position missiles to emplacement or travel modes

Ninety-four percent of respondents reported they were within the E-1 through E-5 paygrades, indicative of an entry-level job. Therefore, a relatively young group of members is directly responsible for maintaining our nation's nuclear deterrent alert status. They reported having an average of 94 months TAFMS. Eighty-six percent of the sample reported holding a minimum of the DAFSC 2M052.

III. PEACEKEEPER MAINTENANCE JOB (ST135, N=37). This job is composed of 6 percent of the sample. Individuals within this job report spending 72 percent of their time performing solely Peacekeeper ICBM missile maintenance, handling, and transporting activities. Representative tasks include removing or installing work platforms and missile guidance control sets (MGCS), performing operational checks on TE vehicles and associated equipment. Respondents report performing an average of 100 tasks. Typical tasks performed include:

perform preoperational checks on TYPE II transporters
operate maintenance and support truck hoists
perform preoperational checks on mechanical maintenance MGCS trucks
raise or lower equipment
perform preoperational checks on air elevator support trailers (AESTs)
remove or install LER work platforms
perform launch facility (LF) entry and exit procedures
open or close canister or stage IV access doors

perform preoperational checks on emplacer trailers or tractors
remove or install MGCS emplacement sets
load or unload MGCSs from support trucks

First-term airmen constitute 35 percent of the Peacekeeper Maintenance Job. The average TAFMS within this cluster is 75 months. Ninety-one percent of job incumbents serve in the paygrade of E-1 through E-5. Accordingly, 32 percent possess DAFSC 2M032A while 57 percent have earned the 5-skill level.

IV. MISSILE MAINTENANCE SUPPORT JOB (ST270, N=27). This job accounts for 4 percent of the sample and is composed primarily of mid-level NCOs. Personnel report spending nearly two-thirds of their time involved with missile maintenance support and missile maintenance activities. They work in the missile mechanical shop and perform many of the inspections, tests, and operational checks of support equipment. Tasks typical of the 89 performed include:

perform periodic inspections on elevator workcages
perform periodic inspections on hoisting units, adapters, or slings
perform operational checks on security pit vault door components
perform proofload test on hoisting units, adapters, or slings
perform proofload test on mechanical maintenance support truck or PT hoists
remove or replace elevator workcage components
perform proofload test on TE hoists and sling rods
perform TE cable tensionings
remove or replace hand-driven linear actuator components
perform proofload test on elevator workcage assemblies

Eighty-nine percent of respondents reported serving in their second or subsequent enlistment. The average TAFMS for this job is 107 months. Personnel within the grades of E-4 through E-6 represent 89 percent of all job incumbents. Eighty-six percent of the sample possess either DAFSC 2M052 or 2M072.

V. PNEUDRAULICS JOB (ST148, N=24). This job represents 4 percent of the sample. Personnel report spending nearly two-thirds of their time involved with either missile pneudraulics or missile maintenance activities. This includes performing periodic and operational checks on both missile component or support equipment hydraulic systems. Job incumbents perform a career ladder high average of 156 tasks; approximately twice the average of 80 tasks within the AFSC 2M0X2 career ladder. Typical tasks performed include:

service hydraulic pusher sets
perform periodic inspections on G&C purging manifolds
perform operational checks on TE hydraulic systems
perform periodic inspections on TE hydraulic systems
adjust TE hydraulic system components
perform periodic inspections on PLTF hydraulic components
repair leak test fixture components
adjust hydraulic pusher set components
adjust G&C purging manifolds
perform periodic inspections on hydraulic pusher sets

There are no first-term airmen represented within the Pneudraulics Job. The average TAFMS within this job is 105 months. All job incumbents possess paygrades E-4 through E-6, reflective of a mid-level position in relation to overall career progression. Appropriately, 96 percent of all respondents reported achieving either the 5- or 7-skill level.

VI. LAUNCH SITE REFURBISHMENT JOB (ST403, N=14). This job is performed by 2 percent of the sample and occurs only at Vandenberg AFB CA. Personnel spend 79 percent of their time performing the career field unique function of postlaunch refurbishment of launch sites. Typical tasks performed include:

penetrate and exit launch equipment buildings (LEBs), launch equipment rooms (LERs), and launch support buildings (LSBs)
open or close launcher closures
remove or replace launcher closure actuator and locking mechanism components
reset, restore, or perform functional checkouts of articulating arm assemblies
remove or install ballistic actuators
perform collimator cover closure resets
remove or install moving sheaves
perform LF damage inspections
remove or replace arresting lugs
adjust missile suspension system (MSS) LEPS switches
perform elevator workcage mounting rail restorations

There are no first-term airmen represented within the Launch Site Refurbishment Job. The average TAFMS within this job is 80 months. Personnel within the paygrades E-4 through E-6 include all job incumbents. Likewise, every refurbishment technician possesses DAFSC 2M052.

VII. RESEARCH AND DEVELOPMENT CLUSTER (ST046, N=14). Members of this cluster account for 2 percent of the sample. Typical duties include performing general research and development activities, management and supervisory activities, propulsion activities, and supply and equipment activities. Respondents report performing an average of 83 tasks. This cluster consists of both mid-level and senior NCO technicians and managers, working exclusively at one of three AFMC laboratories. Alignment of this job with AFSC 2M0X2 is the result of the career field merger between the former AFSC 411X0/X1/X2 and AFSC 2M0X2A (411X1A). Typical tasks performed include:

configure or modify laboratory areas for experiments
configure or reconfigure cryogenic systems
maintain shop equipment
configure or reconfigure high-pressure gas systems
store equipment, tools, parts, or supplies
configure or reconfigure fluid supply systems
inventory equipment, tools, parts, or supplies
initiate documentation to turn in excess or surplus property

There are two related jobs within this cluster. The first job includes a higher proportion of general research and development and management and supervisory activities. Whereas, the second job involves propulsion and solid rocket motor activities.

The Research and Development Cluster is composed of individuals in the paygrades of E-5 through E-7, with an average TAFMS of 184 months. These technicians and managers are exceeded by only the management and supervision cluster, in terms of total seniority. Accordingly, this cluster is indicative of either the mid-to-late phase of overall career progression. All job incumbents hold either DAFSC 2M052 or DAFSC 2M072.

VIII. LAUNCH VEHICLE MAINTENANCE JOB (ST116, N=12). This job has also been assumed by AFSC 2M0X2 as a result of the formerly mentioned reclassification and merger. This group of airmen constitutes 2 percent of the sample. Members spend 75 percent of their time between general launch vehicle, launch vehicle mechanical, propulsion, and management and supervisory activities. Job incumbents report accomplishing an average of 128 tasks. Personnel performing these duties are equally distributed between Cape Canaveral AFS FL and Vandenberg AFB CA. Typical tasks performed include:

ensure compliance with LV propulsion leak check procedures
ensure compliance with LV propellant servicing, inspection, or qualification test procedures

ensure compliance with LV propulsion system component installation or removal procedures
ensure compliance with LV erection or de-erection procedures
ensure compliance with LV mating or demating procedures
ensure compliance with propellant system leak check procedures, other than payload
approve procedural changes or deviations
ensure compliance with LV propulsion system preparation procedures
ensure compliance with propulsion system inspection, checkout, or qualification test procedures
ensure compliance with LV propellant venting operation procedures

The Launch Vehicle Maintenance Job is composed entirely of career airmen with an average TAFMS of 179 months. Ninety-two percent of those surveyed hold the E-5 through E-6 paygrades while the remaining 8 percent hold the grade of master sergeant. There is an equal distribution of members possessing either the DAFSC 2M052 or DAFSC 2M072, at 50 percent respectively. This position is occupied by former AFSC 411X1 mid-to-senior level NCOs.

IX. PAYLOAD CONTROLLER JOB (ST205, N=9). This job has also been assumed by AFSC 2M0X2 as a result of the reclassification and merger of the formerly separate AFSCs 411X1 and 411X1A. Payload Controllers represent slightly more than 1 percent of the sample. Personnel performing these duties work primarily at Cape Canaveral AFS FL; although several are at Vandenberg AFB CA. They spend 60 percent of their time performing either payload, upperstage, or fairing activities or general launch vehicle activities. Typical tasks performed include:

ensure compliance with payload convoy operation procedures
ensure compliance with payload fueling operation procedures
ensure compliance with payload erection or de-erection procedures
approve procedural changes or deviations
ensure compliance with payload final assembly procedures
ensure compliance with payload system checkout procedures
ensure compliance with payload ordnance installation or removal procedures
ensure compliance with payload ordnance checkout procedures
ensure compliance with payload optical or solar surface cleaning or inspection procedures
complete daily activity log entries
conduct or participate in readiness reviews
ensure compliance with payload uploadings or offloadings to aircraft or railcar procedures

The Payload Controller Job consists of nearly 100 percent career airmen in the grades of E-5 through E-7. The average TAFMS for this job is 167 months. Six of the nine respondents reported obtaining DAFSC 2M072. Therefore, this position is also occupied by former AFSC 411X1 mid-to-senior level NCOs.

X. PEACEKEEPER HANDLING JOB (ST119, N=6). This job comprises less than 1 percent of the sample. In addition to management and supervisory activities, individuals report performing missile maintenance and missile handling activities, training, and solid rocket motor activities. This group of personnel has the unique function of providing depot-level missile maintenance and prepares the final Follow-on, Test and Evaluation program shipment to Vandenberg AFB CA. Members report performing an average of 75 tasks related to maintenance of the Peacekeeper ICBM weapon system. This job is exclusively composed of mid-level NCOs working at the AFMC maintenance depot, OO-ALC. Typical tasks performed include:

transfer and handle empty rocket motor carriages
roll transfer stages I, II, or III at storage facilities
perform preoperational checks on general trailers or tractors
inspect general or special purpose equipment
process stages I, II, or III for shipment or storage
evaluate personnel for promotion, demotion, reclassification, or special awards
perform pre- or post-roll transfer operations between MTs and missile storage bunkers (MSBs)

The average TAFMS within this cluster is 132 months. Every person performing these duties is in the paygrade of E-5. All members of this group possess DAFSC 2M052 and report being a first-line supervisor.

XI. QUALITY ASSURANCE JOB (ST174, N=6). These mid-level NCOs also comprise less than 1 percent of the sample. Personnel performing these duties perform management and supervisory, training, administrative, technical order, and inspection-related activities. Quality Assurance personnel provide a valuable service to their owning commander via the enforcement of maintenance standards, and both personnel proficiency and equipment readiness levels. In addition, they conduct safety inspections and maintain the technical order distribution function. They perform an average of 24 tasks, which is indicative of a position limited in task diversity. However, mastery of both administrative practices and technical procedures are required. Typical tasks performed include:

write inspection reports
evaluate serviceability of equipment, tools, parts, or supplies
review technical order changes
conduct safety inspections of equipment or facilities
evaluate personnel for compliance with performance standards
evaluate training methods or techniques of instructors
inspect general or special purpose equipment
inspect training materials or aids for operation or suitability
initiate technical order improvement reports
evaluate maintenance or utilization of equipment, tools, parts, supplies, or workspace

Quality Assurance personnel serve in the E-5 though E-6 paygrades. The average TAFMS within this job is 137 months. Two-thirds of these personnel hold DAFSC 2M052 while the remaining one-third have achieved the 7-skill level.

XII. MANAGEMENT, SUPERVISORY, AND ADMINISTRATIVE CLUSTER (ST068, N=100). This group of airmen consists of 15 percent of the sample. They perform management, supervisory, general administrative, and technical order activities. An average of 131 tasks are performed across this cluster. Jobs within this cluster are reserved for senior level noncommissioned officers, with over 16 years of experience. Typical tasks performed include:

supervise military personnel
counsel subordinates concerning personal matters
conduct supervisory performance feedback sessions
conduct self-inspections or self-assessments
participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting
evaluate personnel for compliance with performance standards
write performance reports or supervisory appraisals

There are 6 IJs found within this cluster. There exists an apparent commonality of managerial and supervisory activities across all jobs. Therefore, only tasks which distinguish between jobs will be identified. The first job is primarily concerned with pure managerial and supervisory activities. Accordingly, 62 percent of the manager's time involves establishing performance standards, conducting personnel performance appraisals, preparing for inspections, and attending meetings. Members of the second job perform those same duties 47 percent of the time. However, they spend 44 percent of their time on administrative, technical order management, and supply and equipment activities. Whereas, members of the third job spend their time balanced across the management, supervisory, and administrative activities. For example, 36 percent of their time is spent performing administrative activities, such as establishing and

maintaining files, 34 percent of their time is spent performing traditional management and supervisory duties, and 22 percent of their time is spent conducting supply and equipment activities, such as maintaining supply and equipment status, submitting requisitions, and performing delivery service. The fourth job includes personnel who report using the maintenance data collection system on a regular basis; i.e., nearly 20 percent of their total time spent. This set of job incumbents routinely plans or schedules work assignments and priorities. The fifth job is composed of personnel who report spending nearly two-thirds of their time directly involved with noncommissioned officer in charge duties. They serve as first-line supervisors and are involved with evaluating and counseling personnel and establishing work schedules. The sixth and final job includes personnel who report being associated with missile maintenance and vehicle and equipment control activities. They evaluate equipment readiness, maintain status boards, and perform vehicle inspections.

The Management, Supervisory, and Administrative Cluster is comprised of 99 percent career airmen. The average TAFMS is 199 months within this cluster, which represents the most senior personnel within AFSC 2M0X2 career ladder. Eighty-three percent of this cluster serve in the grades of E-6 through E-8, and hold DAFSC 2M072.

XIII. SUPPLY AND EQUIPMENT CLUSTER (ST062, N=61). This group of airmen constitutes 9 percent of the sample. They are responsible for the management and maintenance of supplies, equipment, vehicles, and aerospace ground equipment. They perform an average of 24 tasks, which is very low in relation to an average of 80 tasks across AFSC 2M0X2. Thus, this cluster represents several entry-level jobs with a very limited scope of task breadth. Typical tasks performed include:

inventory equipment, tools, parts, or supplies
store equipment, tools, parts, or supplies
evaluate serviceability of equipment, tools, parts, or supplies
maintain handtools or tool boxes
issue or log turn-ins of equipment, tools, parts, or supplies
pick up or deliver equipment, tools, parts, or supplies
inventory tools

There are 4 IJs found within this cluster. The first job is supply and equipment related. Personnel performing these duties work within the maintenance supply section and support both supply and equipment, general maintenance, and vehicle activities. The second job is also supply and equipment related. However, the primary emphasis is on vehicle and equipment control activities. They also support general maintenance activities. In the third job, 21 percent of the group perform managerial and supervisory activities, which distinguishes this job from the others within this cluster. The fourth job represents a closer alignment with core missile maintenance activities. These individuals maintain vehicle status boards and conduct preoperational checks on vehicles and equipment items.

The Supply and Equipment Cluster is composed of 43 percent first term airmen. The average TAFMS found within this cluster is 78 months. Approximately 98 percent of all members are within the E-1 to E-5 grades. Accordingly, 95 percent hold either DAFSC 2M032A or DAFSC 2M052. Therefore, it represents one of several typical starting points for a member of this career ladder.

XIV. TRAINING JOB (ST127, N=17). This job is comprised of 3 percent of the sample. Members schedule, plan, and evaluate training, as well as maintain training records, write lesson plans, and construct test questions. They perform an average of 43 tasks, which is moderately low as compared to the entire career field. However, this job is composed of mid-level NCOs possessing sufficient technical expertise. Typical tasks performed include:

maintain training records or files
schedule personnel for training
personalize lesson plans
evaluate progress of trainees
administer or score tests
plan or schedule training
write test questions
inspect training materials or aids for operation or suitability

There are no first-term airmen represented within the Training Job. The average TAFMS within this job is 156 months. Personnel within the grades of E-5 and E-6 account for 76 percent of all job incumbents. All members of this group possess either DAFSC 2M052 or DAFSC 2M072. Again, this is a mid-level function which requires firm mastery of the training requirements of the career field.

Comparison of Current Job Descriptions to Previous Survey Findings

The results of this specialty job analysis were compared to those of the two previously separate occupational surveys of the Missile Maintenance career ladder, dated January 1994, and of Missile Systems Maintenance, dated September 1993.

Table 5 reflects the specialty job comparison between the current and former AFSC 2M0X2-related surveys. Using the former AFSC 2M0X2A (411X1A) Missile Maintenance career ladder as the foundation from which the current AFSC 2M0X2 Missile and Space Systems career ladder was built, changes are reflected as follows:

TABLE 5

SPECIALTY JOB COMPARISON BETWEEN CURRENT AND FORMER SURVEYS

CURRENT SURVEY (N=652)	1994 2M0X2A SURVEY (N=855)	1993 411X0, 411X1, & 411X2 SURVEY (N=153)
MISSILE MAINTENANCE CLUSTER	MISSILE MAINTENANCE CLUSTER	NOT APPLICABLE
MISSILE HANDLING JOB	MINUTEMAN MISSILE HANDLING	NOT APPLICABLE
PEACEKEEPER MAINTENANCE JOB	PK GUIDANCE AND CONTROL	NOT APPLICABLE
MISSILE MAINTENANCE SUPPORT	MECHANICAL SHOP	NOT APPLICABLE
PNEUDRAULICS JOB	PNEUDRAULICS	NOT APPLICABLE
LAUNCH SITE REFURBISHMENT	LAUNCH SITE REFURBISHMENT	NOT APPLICABLE
RESEARCH AND DEVELOPMENT	NOT APPLICABLE	R & D CLUSTER
LAUNCH VEHICLE MAINTENANCE	NOT APPLICABLE	NOT APPLICABLE
PAYLOAD CONTROLLER JOB	NOT APPLICABLE	PAYLOAD LAUNCH CONTROLLER
PEACEKEEPER HANDLING JOB	PK MISSILE HANDLING	NOT APPLICABLE
QUALITY ASSURANCE JOB	NOT APPLICABLE	NOT APPLICABLE
MANAGEMENT, SUPERVISORY, AND ADMINISTRATIVE CLUSTER	SUPERVISION AND TRAINING CLUSTER, & EMDAS	SUPERVISOR
SUPPLY AND EQUIPMENT CLUSTER	SUPPLY CLUSTER AND VEHICLE MAINTENANCE	NOT APPLICABLE
TRAINING JOB	NOT APPLICABLE	NOT APPLICABLE
NOT APPLICABLE	ELLSWORTH DEACTIVATION	NOT APPLICABLE
NOT APPLICABLE	JOB CONTROL	NOT APPLICABLE
NOT APPLICABLE	NOT APPLICABLE	SPACE LAUNCH CONTROLLER
NOT APPLICABLE	NOT APPLICABLE	ACTION OFFICER
NOT APPLICABLE	NOT APPLICABLE	ENVIRONMENTAL DEFENSE SYSTEM

1. The Research and Development Cluster and the Payload Control Job have been incorporated into the AFSC 2M0X2 from the former AFSC 411X0/X1/X2.

2. The Ellsworth AFB deactivation mission was accomplished.

3. The Job Control Job did not break out as a separate distinguishable function.

4. The duties of three former AFSC 411X0/X1/X2 functions, Space Launch Controller, Environmental Defense Systems, and Action Officer are not represented in the present AFSC 2M0X2. These duties have been assumed by AFSC 2M0X1.

Summary

Four clusters and 10 jobs were identified within the career ladder. The four clusters are composed of Missile Maintenance, Research and Development, Management and Supervision, and Supply and Equipment activities. The jobs identified were Missile Handling, Peacekeeper Maintenance, Missile Maintenance Support, Quality Assurance, Pneudraulics, Training, Launch Vehicle Maintenance, Launch Site Refurbishment, Payload Control, and Peacekeeper Handling.

ANALYSIS OF DAFSC GROUPS

An analysis of DAFSC groups, in conjunction with the analysis of the career ladder structure, is an important part of each occupational survey. The DAFSC analysis identifies differences in tasks performed at the various skill levels. This information may then be used to evaluate how well career ladder documents, such as the AFMAN 36-2108 *Specialty Description* and the *Career Field Education and Training Plan*, reflect what career ladder personnel are actually doing in the field.

The distribution of skill-level groups across the career ladder jobs is displayed in Table 6, while Table 7 offers another perspective by displaying the relative percent of time spent on each duty across the skill-level groups. A typical pattern of progression is noted within the AFSC 2M0X2 career ladder. Personnel at the 3- and 5-skill levels work in the technical jobs within the career ladder and spend most of their time on technical tasks. As incumbents advance to the 7-skill level, higher percentages work in the management and supervisory, and staff jobs although many personnel still spend a portion of their time performing technical tasks.

TABLE 6

DISTRIBUTION OF DAFSC GROUP MEMBERS ACROSS CAREER LADDER JOBS
(PERCENT)

JOB	2M032A (N=118)	2M052 (N=348)	2M072 (N=185)
I. MISSILE MAINTENANCE	39	25	11
II. MISSILE HANDLING	6	11	2
III. PEACEKEEPER MAINTENANCE	10	6	2
IV. MISSILE MAINTENANCE SUPPORT	3	5	3
V. PNEUDRAULICS	1	6	1
VI. POST LAUNCH REFURBISHMENT	0	2	1
VII. RESEARCH AND DEVELOPMENT	0	2	3
VIII. LAUNCH VEHICLE MAINTENANCE	0	2	3
IX. PAYLOAD CONTROL	0	1	3
X. PEACEKEEPER HANDLING	0	2	0
XI. QUALITY ASSURANCE	0	1	1
XII. MANAGEMENT & SUPERVISION CLUSTER	1	55	44
XIII. SUPPLY & EQUIPMENT CLUSTER	22	9	2
XIV. TRAINING	0	3	4
XV. NOT GROUPED	18	20	20

TABLE 7

TIME SPENT ON DUTIES BY MEMBERS OF SKILL-LEVEL GROUPS
(RELATIVE PERCENT OF JOB TIME)

JOB		2M032A (N=118)	2M052 (N=348)	2M072 (N=185)
A.	MANAGEMENT AND SUPERVISORY	5	13	46
B.	TRAINING	*	7	9
C.	GENERAL ADMIN AND TECHNICAL ORDER	2	5	8
D.	GENERAL SUPPLY AND EQUIPMENT	12	7	7
E.	MAINTENANCE MANAGEMENT	*	2	4
F.	GENERAL MAINTENANCE	9	4	2
G.	MISSILE MAINTENANCE	47	30	9
H.	MISSILE HANDLING AND TRANSPORTING	7	9	2
I.	MISSILE MAINTENANCE SUPPORT	5	5	1
J.	VEHICLE AND EQUIPMENT CONTROL	6	3	1
K.	MISSILE PNEUDRAULICS	3	4	*
L.	MISSILE FACILITIES	2	*	*
M.	ORDNANCE DESTRUCT	*	*	*
N.	POSTLAUNCH REFURBISHMENT	*	2	*
O.	PAYLOAD (SPACECRAFT), UPPERSTAGE OR FAIRING	0	*	2
P.	GENERAL LAUNCH VEHICLE	*	2	3
Q.	LAUNCH VEHICLE MECHANICAL	*	*	*
R.	LAUNCH VEHICLE ELECTRICAL	*	*	*
S.	LAUNCH VEHICLE FACILITIES	*	*	*
T.	GENERAL RESEARCH AND DEVELOPMENT	*	1	2
U.	SOLID ROCKET MOTOR	*	*	*
V.	PROPULSION	*	1	1
W.	FACILITY ENVIRONMENTAL DEFENSE SYSTEM	0	*	*

* Less than 1 percent

Skill-Level Descriptions

DAFSC 2M032A. Representing 18 percent of the survey sample, these 118 airmen perform an average of 56 tasks. Fifty-eight percent of this group work in missile maintenance related activities (Table 6). Additionally, 19 percent of these members are working in the Supply and Equipment Cluster. However, 18 percent of the 3-skill level airmen worked in jobs that were not grouped based on task similarity. Representative tasks performed by DAFSC 2M032A incumbents are listed in Table 8. Clearly, the most frequently performed tasks relate to core, ICBM maintenance activities.

DAFSC 2M052. Representing 53 percent of the survey sample, these 348 airmen perform an average of 73 tasks. Thirty-six percent perform missile maintenance related tasks, 11 percent are involved with missile handling activities, and 9 percent report performing duties within the Supply and Equipment Cluster. Otherwise, 34 percent are somewhat equally distributed across the remaining career ladder jobs and 21 percent are not grouped. Representative tasks performed by DAFSC 2M052 incumbents are listed in Table 9. The most frequently reported tasks relate to ICBM maintenance activities. However, it is apparent that first-line supervisory tasks also begin to emerge. Table 10 reflects the tasks which best differentiate between DAFSC 2M032A and DAFSC 2M052 personnel.

DAFSC 2M072. These 185 members represent 28 percent of the survey sample and perform an average of 64 tasks. Forty-four percent of this group work in the Management and Supervision Cluster while 19 percent work in missile maintenance related jobs. Representative tasks performed by DAFSC 2M072 incumbents are listed in Table 11. The most frequently reported tasks clearly involve management, supervisory, and administrative duties. Table 12 reflects the tasks which best differentiate between DAFSC 2M052 and DAFSC 2M072 personnel.

TRAINING ANALYSIS

Occupational survey data are one of many sources of information which can be used to assist in the development of a training program relevant to the needs of personnel in their first enlistment. Factors which may be used in evaluating training include the overall description of the job being performed by first-enlistment personnel and their overall distribution across career ladder jobs, percentages of first-job (1-24 months TAFMS) or first-enlistment (1-48 months TAFMS) members performing specific tasks, as well as TD ratings (previously explained in the **SURVEY METHODOLOGY** section).

TABLE 8

REPRESENTATIVE TASKS PERFORMED BY DAFSC 2M032A PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=118)
F173	Inventory tools	65
F180	Raise or lower equipment	64
G206	Penetrate and exit launch equipment buildings (LEBs), launch equipment rooms (LERs), and launch support buildings (LSBs)	58
F174	Maintain handtools or tool boxes	57
G221	Perform launch facility (LF) entry and exit procedures	53
D142	Inventory equipment, tools, parts, or supplies	50
G248	Perform preoperational checks on PT semi-trailers or truck-tractors	50
G204	Operate maintenance and support truck hoists	49
G240	Perform preoperational checks on environmental control systems (ECSs) or auxiliary power units (APUs)	49
G203	Open or close launcher closures	48
D137	Evaluate serviceability of equipment, tools, parts, or supplies	46
G220	Perform inspections on RS insulation	46
G296	Remove or install RSs	45
J479	Load or unload equipment on general purpose vehicles	44
G280	Remove or install elevator workcages	44
G199	Load or unload RSs	43
J477	Inspect general or special purpose equipment	42
G205	Operate payload transporter (PT) system components	42
F178	Perform minor repair actions, such as splicing wires, soldering, or tightening parts	42
G245	Perform preoperational checks on hydraulic pusher sets	42
G255	Perform RS handling and transporting procedures	41
A6	Conduct safety inspections of equipment or facilities	39
G268	Position, stabilize, or destabilize PTs	39
G217	Perform inspections on MGS insulation	39
D148	Pick up or deliver equipment, tools, parts, or supplies	38
D138	Identify and report equipment or supply problems	37
G242	Perform preoperational checks on general trailers or tractors	34
I432	Perform operational checks on PT hoist or hoist systems	31
D149	Store equipment, tools, parts, or supplies	30
D143	Issue or log turn-ins of equipment, tools, parts, or supplies	25
J478	Load or unload equipment for electromechanical team (EMT), facilities maintenance team (FMT), or MMT dispatches	25

TABLE 9

REPRESENTATIVE TASKS PERFORMED BY DAFSC 2M052 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=348)
F173	Inventory tools	50
A6	Conduct safety inspections of equipment or facilities	48
D137	Evaluate serviceability of equipment, tools, parts, or supplies	47
D142	Inventory equipment, tools, parts, or supplies	46
F180	Raise or lower equipment	46
F178	Perform minor repair actions, such as splicing wires, soldering, or tightening parts	45
G221	Perform launch facility (LF) entry and exit procedures	42
F174	Maintain handtools or tool boxes	41
G206	Penetrate and exit launch equipment buildings (LEBs), launch equipment rooms (LERs), and launch support buildings (LSBs)	41
J477	Inspect general or special purpose equipment	40
A7	Conduct self-inspections or self-assessments	40
G203	Open or close launcher closures	36
D149	Store equipment, tools, parts, or supplies	34
G241	Perform preoperational checks on forklifts	34
G242	Perform preoperational checks on general trailers or tractors	33
A57	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	32
D138	Identify and report equipment or supply problems	32
A12	Counsel subordinates concerning personal matters	32
G248	Perform preoperational checks on PT semi-trailers or truck-tractors	32
A10	Conduct supervisory performance feedback sessions	30
D148	Pick up or deliver equipment, tools, parts, or supplies	30
B81	Conduct OJT	29
A69	Supervise military personnel	28
A43	Evaluate personnel for compliance with performance standards	28
J482	Perform general or special purpose vehicle pre- or post-dispatch inspections	27
D134	Coordinate maintenance of equipment with appropriate	23
C124	Maintain technical order libraries	10

TABLE 10

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 2M032A AND DAFSC 2M052 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		2M032A (N=118)	2M052 (N=348)	DIFFERENCE
G209	Perform emergency war order (EWO) LF evacuations	48	29	20
G220	Perform inspections on RS insulation	46	26	19
G248	Perform preoperational checks on PT semi-trailers or truck-tractors	50	32	18
F180	Raise or lower equipment	64	46	18
G280	Remove or install elevator workcages	44	27	17
G191	Inspect missile guidance control systems (MGCSs)	34	17	17
G296	Remove or install RSs	45	28	17
G206	Penetrate and exit launch equipment buildings (LEBs), launch equipment rooms (LERs), and launch support buildings (LSBs)	58	41	17
F174	Maintain handtools or tool boxes	57	41	16
J479	Load or unload equipment on general purpose vehicles	44	28	16
G217	Perform inspections on MGS insulation	39	23	16
A12	Counsel subordinates concerning personal matters	2	32	-30
A43	Evaluate personnel for compliance with performance standards	*	28	-28
A10	Conduct supervisory performance feedback sessions	3	30	-27
A69	Supervise military personnel	3	28	-25
A7	Conduct self-inspections or self-assessments	16	40	-24
B91	Evaluate progress of trainees	1	25	-24
A53	Inspect personnel for compliance with military standards	4	28	-24
B95	Maintain training records or files	1	25	-24
B81	Conduct OJT	6	29	-23
B97	Plan or schedule training	1	23	-22

TABLE 11

REPRESENTATIVE TASKS PERFORMED BY DAFSC 2M072 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=185)
A57	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	70
A43	Evaluate personnel for compliance with performance standards	66
A7	Conduct self-inspections or self-assessments	65
A12	Counsel subordinates concerning personal matters	65
A10	Conduct supervisory performance feedback sessions	64
A69	Supervise military personnel	63
A72	Write performance reports or supervisory appraisals	59
A53	Inspect personnel for compliance with military standards	57
A18	Develop or establish work schedules	56
A6	Conduct safety inspections of equipment or facilities	56
A5	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	52
A73	Write recommendations for awards or decorations	52
A17	Develop or establish work methods or procedures	51
A31	Establish performance standards for subordinates	51
A9	Conduct supervisory orientations for newly assigned personnel	50
A13	Determine or establish logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	48
A2	Assign personnel to work areas or duty positions	46
A62	Plan or schedule work assignments or priorities	44
A44	Evaluate personnel for promotion, demotion, reclassification, or special awards	44
A54	Interpret policies, directives, or procedures for subordinates	42
A41	Evaluate logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	41
A47	Evaluate work schedules	40
D137	Evaluate serviceability of equipment, tools, parts, or supplies	40
A65	Review drafts of regulations, manuals, or other directives	38
A42	Evaluate maintenance or utilization of equipment, tools, parts, supplies, or workspace	36
A49	Indorse performance reports or supervisory appraisals	35
A37	Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) Program	34
C122	Maintain or update status indicators, such as boards, graphs, or charts	29
C131	Review technical order changes	29

TABLE 12

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 2M052 AND DAFSC 2M072 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		2M052 (N=348)	2M072 (N=185)	DIFFERENCE
F180	Raise or lower equipment	46	16	30
G221	Perform launch facility (LF) entry and exit procedures	42	13	29
F178	Perform minor repair actions, such as splicing wires, soldering, or tightening parts	45	17	28
G222	Perform LEB or LSB emergency electrical isolation procedures	39	12	27
G206	Penetrate and exit launch equipment buildings (LEBs), launch equipment rooms (LERs), and launch support buildings (LSBs)	41	15	26
G204	Operate maintenance and support truck hoists	38	12	26
G223	Perform LF emergency shutdowns	36	10	26
G241	Perform preoperational checks on forklifts	34	9	25
G183	Change tires or wheels on general purpose vehicles	41	16	25
G203	Open or close launcher closures	36	12	24
A31	Establish performance standards for subordinates	19	51	-32
A66	Schedule personnel for temporary duty (TDY) assignments, leaves, or passes	5	37	-32
A44	Evaluate personnel for promotion, demotion, reclassification, or special awards	13	44	-31
A41	Evaluate logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	10	41	-31
A47	Evaluate work schedules	10	40	-30
A49	Indorse performance reports or supervisory appraisals	5	35	-30
A54	Interpret policies, directives, or procedures for subordinates	12	42	-30
A62	Plan or schedule work assignments or priorities	14	44	-30
A65	Review drafts of regulations, manuals, or other directives	10	38	-28

First-Enlistment Personnel

In this study, there are 118 members in their first enlistment (1-48 months TAFMS), representing 18 percent of the total survey sample. Figure 2 reflects the distribution of these first-enlistment personnel across the career ladder. Most of their duty time is spent on either maintenance or supply and equipment related activities. Table 13 displays the relative percent of time spent on duties by first-enlistment personnel. In reviewing the table, 48 percent of first-enlistment personnel are performing Missile Maintenance duties. In addition, they are also performing Missile Handling and Transport, and support activities. However, AFSC 2M0X2 first-enlistment personnel are not well represented in neither the maintenance subspecialties; e.g., Missile Pneudraulics, nor within the former AFSC 411X0/411X1/411X2 spacelift specialties, e.g., Launch Vehicle Maintenance. Table 14 indicates representative tasks performed by DAFSC 2M0X2 first-enlistment personnel. Common maintenance related tasks include maintaining tools, operating equipment, and performing inspections.

Task Difficulty (TD) Data

TD data are secondary factors that can assist technical school personnel in deciding which tasks should be emphasized in entry-level training. These ratings, based on the judgments of senior career ladder NCOs working at operational units in the field, are collected to provide training personnel with a rank-ordering of those tasks in the JI considered difficult within AFSC 2M0X2 (see selected high rated tasks presented in Table 15). When combined with data on the percentages of first-enlistment personnel performing tasks, comparisons can then be made to determine if training adjustments are necessary. For example, tasks receiving high difficulty ratings, accompanied by moderate to high percentages of member's performing, may warrant resident operational training. Those tasks receiving high task factor ratings, but low percentages performing, may be more appropriately planned for OJT programs within the career ladder. Low task factor ratings may highlight tasks best omitted from training for first-enlistment personnel, but this decision must be weighed against percentages of personnel performing the tasks, command concerns, and criticality of the tasks.

For example, Table 15 reports that TD raters indicated removing, repairing, and replacing optical systems and troubleshooting laser systems to be among the most difficult tasks to learn. However, due to the low numbers of individuals performing these types of tasks, these tasks would be inappropriate for including in a resident operational training curriculum. Rather, it would be more appropriate to instruct these items on an OJT basis.

Various lists of tasks, accompanied by TD ratings, and where appropriate, Automated Training Indicator information, are contained in the **TRAINING EXTRACT** package and should be reviewed in detail by technical school personnel. (For a more detailed explanation of TE and TD ratings, see Task Factor Administration in the **SURVEY METHODOLOGY** section of this report.)

AFSC 2M0X2
FIRST-ENLISTMENT JOBS

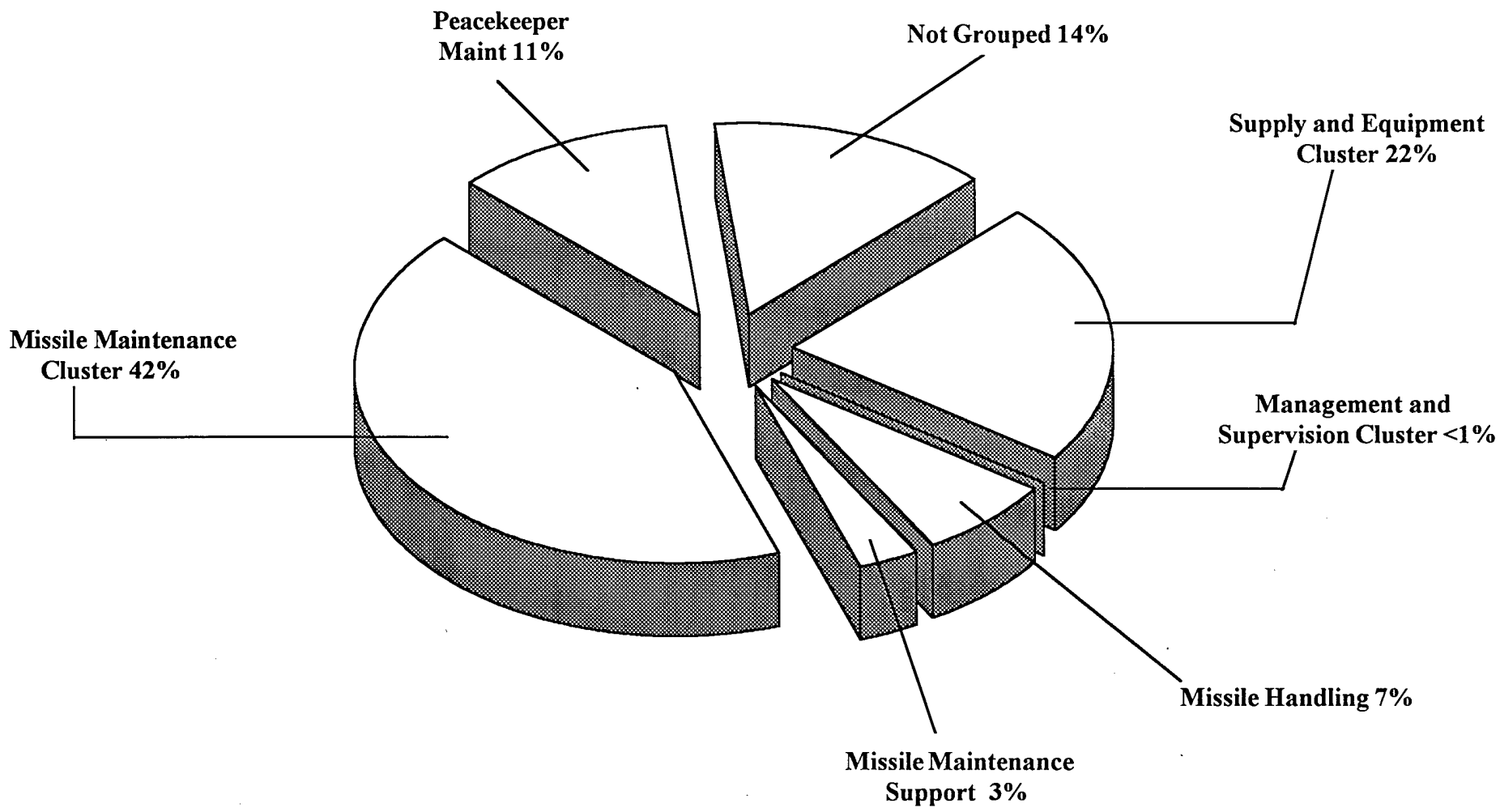

FIGURE 2

TABLE 13

RELATIVE PERCENT TIME SPENT ON DUTIES BY
FIRST-ENLISTMENT PERSONNEL
(N=118)

A	MANAGEMENT AND SUPERVISORY	4
B	TRAINING	*
C	GENERAL ADMIN AND TECHNICAL ORDER	2
D	GENERAL SUPPLY AND EQUIPMENT	12
E	MAINTENANCE MANAGEMENT	*
F	GENERAL MAINTENANCE	9
G	MISSILE MAINTENANCE	48
H	MISSILE HANDLING AND TRANSPORTING	6
I	MISSILE MAINTENANCE SUPPORT	5
J	VEHICLE AND EQUIPMENT CONTROL	6
K	MISSILE PNEUDRAULICS	3
L	MISSILE FACILITIES	2
M	ORDNANCE DESTRUCT	*
N	POSTLAUNCH REFURBISHMENT	*
O	PAYLOAD (SPACECRAFT), UPPERSTAGE OR FAIRING	0
P	GENERAL LAUNCH VEHICLE	*
Q	LAUNCH VEHICLE MECHANICAL	*
R	LAUNCH VEHICLE MECHANICAL	*
S	LAUNCH VEHICLE FACILITIES	*
T	GENERAL RESEARCH AND DEVELOPMENT	*
U	SOLID ROCKET MOTOR	*
V	PROPULSION	*
W	FACILITY ENVIRONMENTAL DEFENSE SYSTEM	0

* Less than 1 percent

TABLE 14

REPRESENTATIVE TASKS PERFORMED BY DAFSC 2M0X2
FIRST-ENLISTMENT PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=118)
F180	Raise or lower equipment	64
F173	Inventory tools	63
F174	Maintain handtools or tool boxes	61
G206	Penetrate and exit launch equipment buildings (LEBs), launch equipment rooms (LERs), and launch support buildings (LSBs)	59
G221	Perform launch facility (LF) entry and exit procedures	54
D142	Inventory equipment, tools, parts, or supplies	53
G248	Perform preoperational checks on PT semi-trailers or truck-tractors	52
G203	Open or close launcher closures	52
G204	Operate maintenance and support truck hoists	51
G240	Perform preoperational checks on environmental control systems (ECSs) or auxiliary power units (APUs)	49
G209	Perform emergency war order (EWO) LF evacuations	49
G220	Perform inspections on RS insulation	47
G296	Remove or install RSs	47
G199	Load or unload RSs	47
G256	Perform self-test on colorimetric gas detectors	47
G223	Perform LF emergency shutdowns	47
G280	Remove or install elevator workcages	46
F177	Operate missile electronic encryption devices (MEEDs)	46
G214	Perform inspections on launcher closure components	45
G222	Perform LEB or LSB emergency electrical isolation procedures	45
D137	Evaluate serviceability of equipment, tools, parts, or supplies	44
J479	Load or unload equipment on general purpose vehicles	44
J477	Inspect general or special purpose equipment	43
G205	Operate payload transporter (PT) system components	43
G255	Perform RS handling and transporting procedures	42
G245	Perform preoperational checks on hydraulic pusher sets	42
G213	Perform hazardous current checks	42

TABLE 15

SAMPLE OF TASKS WITH HIGHEST TASK DIFFICULTY RATINGS

TASKS		TSK DIF	PERCENT MEMBERS PERFORMING 1ST JOB	1ST ENL	2M032A	2M052	2M072
T1041	Remove, repair, or replace optical system components	7.94	0	0	0	1	1
T1060	Troubleshoot laser systems or components	7.55	0	0	0	0	0
T987	Design or build laser cavities	7.55	0	0	0	0	1
T988	Design or build laser systems	7.55	0	0	0	0	1
H394	Remove or install air elevators	7.50	4	4	3	2	1
G290	Remove or install missile skirt umbilicals	7.22	16	23	22	16	9
G211	Perform forced break-in entry procedures for secondary	7.19	15	21	21	16	7
K560	Service LCC pneumatic shock absorber systems	7.12	4	3	3	4	1
T965	Adjust laser system components	7.10	0	0	0	1	2
T985	Design data acquisition systems	7.10	0	0	0	0	1
T967	Align laser systems	7.10	0	0	0	1	1
T1030	Remove or install furnaces	7.10	0	0	0	1	1
T997	Fabricate electronic devices	7.10	0	0	0	0	1
T1054	Set up EM or RF interference enclosures	7.10	0	0	0	0	1
T1039	Remove, repair, or replace laser beam shutter	7.10	0	0	0	1	0
T968	Align telescopes	7.10	0	0	0	1	0
T993	Design, build, or maintain control systems	7.10	0	0	0	1	1
T994	Design, build, or repair circuit boards	7.10	0	0	0	1	1
T1059	Troubleshoot heater aging stand components	7.10	0	0	0	0	1

TD MEAN = 5.00; S.D. = 1

Specialty Training Standard (STS)

A comprehensive review of STS 2M0X2, dated June 1996, compared STS items to survey data (based on the previously mentioned assistance from SMEs in matching JI tasks to STS elements). STS paragraphs containing general knowledge information, mandatory entries, subject-matter-knowledge-only requirements, or basic supervisory responsibilities were not examined. Task knowledge and performance elements of the STS were compared against the standards set forth in AETCI 36-2601 and AFI 36-2623 (i.e., include tasks performed or knowledge required by 20 percent or more of the personnel in either their first-job, first-enlistment, or at the 5- and 7-skill level (criterion groups) within the AFS).

Overall, the STS provides very comprehensive coverage of the work performed by personnel in this career ladder, with survey data supporting all of the essential paragraphs or subparagraphs. On the initial analysis, many STS line items were not supported due to their not having high percentages of personnel performing matched tasks. However, secondary analysis identified the majority of these tasks to be part of an identifiable job being performed within the career ladder. Retention of the STS element involving those tasks were supported. In fact, there was only one nonsupported, matched task: STS line item 21b (peacekeeper launch facility) with task L621, perform periodic inspections of LF MGCS access barrier sets. All other matched tasks were supported by having a minimum of 20 percent of the work force reporting they perform the task.

Tasks not matched to any element of the STS are listed at the end of the STS computer listing. These were reviewed to determine if there were any tasks concentrated around any particular functions or jobs. For the most part, these tasks are comprised of highly specialized duties found within many of the nontraditional missile maintenance jobs; e.g., the Research and Development Cluster. Several technical tasks were performed by 20 percent or more of the respondents of the STS target groups, but which were not referenced to any STS element. Most of these examples include tasks which are rather general in nature, such as: preoperational checks on forklifts, trucks, and groundheaters; operating maintenance and support truck hoists; and performing minor repair actions. Other technically related nonmatched tasks include removing or installing ballistic gas generators, RS simulators, and umbilical retraction actuators. In general, the AFSC 2M0X2 STS provides a highly effective training document, as the majority of the frequently performed tasks are in fact matched to the appropriate STS line item. Training personnel and SMEs may opt to consider these unreferenced tasks in order to determine if inclusion in the STS is justified.

JOB SATISFACTION ANALYSIS

An examination of the job satisfaction indicators of various groups can give career ladder managers a better understanding of some of the factors which may affect the job performance of airmen in the career ladder. Attitude questions covering job interest, perceived utilization of talents and training, sense of accomplishment from work, and reenlistment intentions were included in the survey booklet to provide indications of job satisfaction.

Table 16 presents job satisfaction data for AFSC 2M0X2 TAFMS groups, together with TAFMS data for a comparative sample of Mission Equipment career ladders surveyed in 1996. These data provide a relative measure of AFSC 2M0X2 job satisfaction data compared with other similar Air Force specialties. Across both the 1-48 and 49-96 TAFMS groups, the AFSC 2M0X2 personnel rated their job as less interesting than the comparative sample, while the 97+ TAFMS rendered a more positive rating. Also, the perception of utilization of talents, sense of accomplishment gained from work, and reenlistment intentions are rated lower than the comparative sample. The perception of the utilization of training was comparably positive across all TAFMS groups.

An indication of how job satisfaction perceptions have changed over time is provided in Table 17, where again TAFMS data for the current survey respondents are presented, along with data from the 1994 AFSC 2M0X2A OSR. In review, current survey satisfaction ratings for job interest, perceived utilization of talents, sense of accomplishment gained from work, and reenlistment intentions are categorically lower than all AFSC 2M0X2A TAFMS groups, except for a slightly more positive job interest rating for the 97+ TAFMS group. Longitudinal TAFMS comparative data from the 1993 AFSC 411X0/X1/X2 OSR were not available.

In Table 18, a review of the job satisfaction data for personnel in the specialty jobs identified in this survey reveals that airmen in most jobs responded very positively to all the indicators listed. The exceptions were the Peacekeeper Maintenance Job, the Launch Site Refurbishment Job, and the Supply Cluster, whose incumbents indicated lower ratings than members of other jobs.

IMPLICATIONS

This survey was initiated to provide current job and task data for use in evaluating the AFMAN 36-2108 *Specialty Description* and appropriate training documents. Survey results clearly indicate that the present classification structure, as described in the latest specialty description, accurately portrays the jobs performed in this career ladder. Career ladder training documents appear, on the whole, to be well supported by survey data. As was pointed out in the **JOB SATISFACTION ANALYSIS** section, job satisfaction responses by AFSC 2M0X2

TABLE 16

COMPARISON OF JOB SATISFACTION INDICATORS BY TAFMS GROUPS
(PERCENT MEMBERS RESPONDING)

	1-48 MOS TAFMS		49-96 MOS TAFMS		97+ MOS TAFMS	
	1997 2M0X2 (N=118)	COMP SAMPLE* (N=4,506)	1997 2M0X2 (N=162)	COMP SAMPLE* (N=3,339)	1997 2M0X2 (N=372)	COMP SAMPLE* (N=9,548)
EXPRESSED JOB INTEREST:						
INTERESTING	59	75	64	73	80	78
SO-SO	22	16	26	16	14	14
DULL	18	9	10	11	6	8
PERCEIVED UTILIZATION OF TALENTS:						
FAIRLY WELL TO PERFECTLY	65	84	74	83	83	85
LITTLE OR NOT AT ALL	34	17	26	17	17	15
PERCEIVED UTILIZATION OF TRAINING:						
FAIRLY WELL TO PERFECTLY	82	79	82	84	76	82
LITTLE OR NOT AT ALL	16	11	17	16	24	18
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:						
SATISFIED	60	73	64	72	76	74
NEUTRAL	18	14	19	13	9	11
DISSATISFIED	21	13	17	15	15	15
REENLISTMENT INTENTIONS:						
YES, OR PROBABLY YES	55	63	67	73	75	78
NO, OR PROBABLY NO	45	36	33	26	6	7
PLAN TO RETIRE	0	1	0	1	18	15

* Comparative sample of Mission Equipment Management career ladders surveyed in 1996 include the 2AXXX, 2EXXX, 2PXXX, and 3E8X1 AFSCs

TABLE 17

COMPARISON OF CURRENT SURVEY AND PREVIOUS SURVEY TAFMS GROUPS
(PERCENT MEMBERS RESPONDING)

	1-48 MOS TAFMS		49-96 MOS TAFMS		97+ MOS TAFMS	
	1997 2M0X2 (N=118)	1994 2M0X2A (N=307)	1997 2M0X2 (N=162)	1994 2M0X2A (N=223)	1997 2M0X2 (N=372)	1994 2M0X2A (N=325)
EXPRESSED JOB INTEREST:						
INTERESTING	59	64	64	74	80	78
SO-SO	22	19	26	17	14	17
DULL	18	18	10	9	6	5
PERCEIVED UTILIZATION OF TALENTS:						
FAIRLY WELL TO PERFECTLY	65	67	74	84	83	88
LITTLE OR NOT AT ALL	34	33	26	16	17	12
PERCEIVED UTILIZATION OF TRAINING:						
FAIRLY WELL TO PERFECTLY	82	84	82	88	76	79
LITTLE OR NOT AT ALL	16	16	17	12	24	21
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:						
SATISFIED	60	68	64	74	76	78
NEUTRAL	18	15	19	14	9	10
DISSATISFIED	21	17	17	12	15	11
REENLISTMENT INTENTIONS:						
YES, OR PROBABLY YES	55	61	67	87	75	85
NO, OR PROBABLY NO	45	38	33	13	6	2
PLAN TO RETIRE	0	0	0	0	18	13

TABLE 18

COMPARISONS OF JOB SATISFACTION INDICATORS BY SPECIALTY JOBS
(PERCENT MEMBERS RESPONDING)

	MISSILE MAINT CLUSTER (N=153)	MISSILE HANDLING (N=49)	PEACEKEEPER MAINT (N=37)	MISSILE MAINT SUPPORT (N=27)	PNEUDRAULICS (N=24)
EXPRESSED JOB INTEREST:					
INTERESTING	74	76	59	74	63
SO-SO	19	20	22	15	21
DULL	7	4	19	11	17
PERCEIVED UTILIZATION OF TALENTS:					
FAIRLY WELL TO PERFECTLY	84	86	65	89	80
LITTLE OR NOT AT ALL	16	14	35	11	20
PERCEIVED UTILIZATION OF TRAINING:					
FAIRLY WELL TO PERFECTLY	97	96	97	89	96
LITTLE OR NOT AT ALL	3	4	3	11	4
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:					
SATISFIED	70	73	59	81	67
NEUTRAL	14	16	27	11	13
DISSATISFIED	15	10	14	7	21
REENLISTMENT INTENTIONS:					
YES, OR PROBABLY YES	78	71	54	67	71
NO, OR PROBABLY NO	20	24	38	19	29
WILL RETIRE	1	4	5	15	0

TABLE 18 (CONTINUED)

COMPARISONS OF JOB SATISFACTION INDICATORS BY SPECIALTY JOBS
(PERCENT MEMBERS RESPONDING)

	LAUNCH SITE REFURBISH (N=14)	RESEARCH AND DEVELOP CLUSTER (N=14)	LAUNCH VEHICLE MAINT (N=12)	PAYLOAD CONTROL (N=9)	PK HANDLING (N=6)
EXPRESSED JOB INTEREST:					
INTERESTING	50	93	83	89	83
SO-SO	50	0	8	0	0
DULL	0	7	8	11	17
PERCEIVED UTILIZATION OF TALENTS:					
FAIRLY WELL TO PERFECTLY	57	92	75	78	83
LITTLE OR NOT AT ALL	43	7	25	22	17
PERCEIVED UTILIZATION OF TRAINING:					
FAIRLY WELL TO PERFECTLY	64	50	75	78	83
LITTLE OR NOT AT ALL	36	50	25	22	17
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:					
SATISFIED	43	93	75	89	83
NEUTRAL	43	0	0	0	0
DISSATISFIED	14	7	25	11	17
REENLISTMENT INTENTIONS:					
YES, OR PROBABLY YES	79	50	58	78	100
NO, OR PROBABLY NO	21	14	0	0	0
WILL RETIRE	0	36	42	22	0

TABLE 18 (CONTINUED)

COMPARISONS OF JOB SATISFACTION INDICATORS BY SPECIALTY JOBS
(PERCENT MEMBERS RESPONDING)

	QUALITY ASSURANCE (N=6)	MGMT AND SUPVSN (N=100)	SUPPLY CLUSTER (N=61)	TRAINING (N=17)
EXPRESSED JOB INTEREST:				
INTERESTING	83	79	54	94
SO-SO	17	17	23	6
DULL	0	4	23	0
PERCEIVED UTILIZATION OF TALENTS:				
FAIRLY WELL TO PERFECTLY	83	79	55	100
LITTLE OR NOT AT ALL	17	21	45	0
PERCEIVED UTILIZATION OF TRAINING:				
FAIRLY WELL TO PERFECTLY	100	73	50	94
LITTLE OR NOT AT ALL	0	27	50	6
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:				
SATISFIED	83	75	56	100
NEUTRAL	17	9	16	0
DISSATISFIED	0	16	28	0
REENLISTMENT INTENTIONS:				
YES, OR PROBABLY YES	100	69	62	76
NO, OR PROBABLY NO	0	6	33	0
WILL RETIRE	0	25	5	24

personnel reported the utilization of training is sufficient, thus indicating support for the overall training system. Additionally, the career ladder progression is good, with advancement from technical work at the 3- and 5-skill levels to supervisory and management at the 7-skill level.

The past 4 years have included mission deactivations, realignment of weapon systems, personnel reductions, and career field mergers. Future deactivations and systems reconfigurations remain a genuine possibility. Presently, there appears to be little integration between personnel from the former AFSCs 2M0X2A and 411X0/411X1/411X2. The majority of personnel within the Research and Development, Launch Vehicle Maintenance, and Payload Controller jobs have an average of nearly 15 years TAFMS. Therefore, without management intervention, these space-related opportunities will be reserved for senior members only. Despite the challenges, job satisfaction rates of AFSC 2M0X2 personnel do improve across TAFMS groups. Therefore, as an individual accrues more seniority, perceived satisfaction levels increase.